

IN THE CLAIMS:

1. (Currently Amended) A process for machining ~~said~~ workpieces (6) with a moving laser beam (4), ~~wherein the~~ process comprising:

holding the laser tool that can emit a laser (3) ~~is held~~ by a multiaxial mechanical manipulator (2) at a manipulator hand (8) at a spaced location above the workpiece (6);

5 moving and moved the laser beam along a predetermined path during a displacing motion, ~~characterized in that a;~~ and

superimposing an at least partially oppositely directed compensating motion of the laser beam (4) ~~is superimposed~~ to the displacing motion during the machining operation.

2. (Currently Amended) A process in accordance with claim 1, ~~characterized in that~~ wherein the workpiece (6) is machined intermittently, while machining phases and transport phases alternate, wherein the point at which the laser beam (4) reaches the surface gets ahead of the laser tool (3) or the low end of a flange system of coordinates at the beginning of a machining phase and trails it at the end of the machining phase.

3. (Currently Amended) A process in accordance with claim 1 ~~[[or 2]]~~, ~~characterized in that a;~~ wherein an at least partially transversely directed compensating motion of the laser beam (4) is superimposed to the displacing motion during the machining operation.

4. (Currently Amended) A process in accordance with claim 1, ~~2 or 3~~, ~~characterized~~

~~in that~~ wherein the velocity of displacement V_r is greater than the oppositely directed compensating velocity V_w .

5. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the velocity of displacement V_r is greater than the machining velocity V_s of the laser beam (4) at the workpiece (6).

6. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the compensating motion of the laser beam (4) is an angular motion.

7. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the compensating motion of the laser beam (4) is performed by a pivoting motion of the manipulator hand (8) about one of its said hand axes.

8. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the laser tool (3) is held by means of a extension arm (5) at a spaced location from the manipulator hand (8).

9. (Currently Amended) A process in accordance with ~~one of the claims~~ claim 1 ~~through 6~~, ~~characterized in that~~ wherein the compensating motion of the laser beam (4) is

performed by a mobile scanning means (17) at the laser tool (3).

10. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the laser beam (4) is directed toward the workpiece (6) at the beginning of machining with a obliquely forwardly directed beam angle α α' .

11. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the laser beam (4) is directed toward the workpiece (6) at the end of the machining with an obliquely rearwardly directed beam angle β , β' .

12. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the manipulator (2) performs an, essentially constant displacing motion during the machining.

13. (Currently Amended) A process in accordance with ~~one of the above claims~~ claim 1, ~~characterized in that~~ wherein the manipulator (2) performs an, essentially constant or accelerated displacing motion during the transport phases between the machinings.

14. (Currently Amended) A device for machining said workpieces (6) ~~with~~ a moving laser beam (4), the device comprising:

a ~~wherein the~~ laser tool (3) ~~is~~ held by a multiaxial mechanical manipulator (2) at a

manipulator hand (8) ~~and is~~ said laser tool being movable along a preset path during a displacing motion, ~~characterized in that the manipulator (2) has~~ having a means for generating a compensating motion of the laser beam (4), which said motion takes place during the machining operation and is directed opposite and is superimposed to the displacing motion.

15. (Currently Amended) A device in accordance with claim 14, ~~characterized in that~~ wherein the manipulator (2) has a multiaxial manipulator hand (8), in which at least one said hand axis can be controlled independently from the displacing motion.

16. (Currently Amended) A device in accordance with claim 14 ~~or 15, characterized in that~~ wherein the laser tool (3) is mounted on the manipulator hand (8) by means of an extension arm (5) that creates a distance.

17. (Currently Amended) A device in accordance with claim 14, ~~15 or 16, characterized in that~~ wherein the laser tool (3) has a focusing optical system for generating a fixed-angle laser beam (4).

18. (Currently Amended) A device in accordance with ~~one of the above claims~~ claim 14, ~~characterized in that~~ wherein the laser tool (3) has a fixed focal distance.

19. (Currently Amended) A device in accordance with ~~one of the above claims~~ claim 14,

~~characterized in that~~ wherein the laser tool (3) has a focal distance of approx. 150 mm to 400 mm.

20. (Currently Amended) A device in accordance with claim 14, ~~characterized in that~~ wherein the laser tool (3) has a mobile, controllable scanning means (17).

21. (Currently Amended) A device in accordance with ~~one of the above claims~~ claim 14, ~~characterized in that~~ wherein the manipulator (2) is designed as a, at least six-axis articulated-arm robot.

22. (Currently Amended) A device in accordance with ~~one of the above claims~~ claim 14, ~~characterized in that~~ wherein the laser tool (3) is designed as a welding tool.

23. (New) A process in accordance with claim 2, wherein an at least partially transversely directed compensating motion of the laser beam is superimposed to the displacing motion during the machining operation.